

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of the claims in the application.

1. (Currently Amended) A method of raising a temperature of an object contained hermetically in a container to a predetermined temperature, the method comprising:

a first step of measuring a temperature of the container and an ambient temperature around the container;

a second step of determining an amount of heat energy necessary for raising the temperature of the contained object up to the predetermined temperature, the determination being based on the container temperature and the ambient temperature; [[and]]

a third step of supplying heat energy to the container, based on a result of the second step; and

~~wherein the method further comprises~~ a fourth step, performed between the first step and the second step, of estimating the temperature of the contained object based on the container temperature and the ambient temperature, ~~and wherein in the fourth step~~[[,]]including

pre-examining correlation between an object-container temperature difference and the ambient temperature, measured during a predetermined period of time starting from the beginning of raising the temperature, the predetermined period of time being within a range of 10 seconds to 2 minutes, and

calculating the estimated temperature of the contained object is calculated based on [[a]] the pre-examined correlation~~between an object-container temperature difference~~

~~when a predetermined time passes from the beginning of temperature raising and the ambient temperature when the predetermined time passes.~~

2. (Previously Presented) The method of raising a temperature of a contained object according to claim 1, wherein the container comprises a receptacle having an opening and a seal for sealing the opening,

wherein the measurement of the container temperature in the first step is performed at the seal.

3. (Previously Presented) The method of raising a temperature of a contained object according to claim 1, wherein in the second step, the estimated temperature is checked to be higher or lower than an additional predetermined temperature set lower than said predetermined temperature, and wherein the amount of heat energy to be supplied to the container is determined based on the check result.

4. (Previously Presented) The method of raising a temperature of a contained object according to claim 3, wherein in the second step, the amount of heat energy to be supplied to the container is determined so that the amount of heat energy to be supplied to the container per unit time is smaller when the estimated temperature is higher than the additional predetermined temperature, than when the estimated temperature is lower than the additional predetermined temperature.

5. (Cancelled)

6. (Previously Presented) The method of raising a temperature of a contained object according to claim 1, wherein the predetermined time is set for an initial stage of raising the temperature of the contained object up to the predetermined temperature where a temperature rising rate of the contained object and the container per unit time is relatively large.

7. (Cancelled) ~~The method of raising a temperature of a contained object according to claim 6, wherein the predetermined time is set at a value selected from a range of 10 seconds to 2 minutes after the beginning of the temperature raising.~~

8. (Previously Presented) The method of raising a temperature of a contained object according to claim 1, wherein in the third step, the container is brought into contact with a heat medium, and control of the amount of heat energy to be supplied to the container is performed by controlling the temperature of the heat medium.

9. (Previously Presented) The method of raising a temperature of a contained object according to claim 8, wherein the heat medium is a heating block.

10. (Currently Amended) A method of raising a temperature of a contained object sealed in a container, up to a predetermined temperature, by supplying heat energy to the container brought into contact with a heating block, the method comprising:

a first step of measuring ambient temperature around the container immediately before raising the temperature;

a second step of determining an amount of heat energy necessary for raising the temperature of the contained object up to the predetermined temperature, based on the ambient temperature, the second step including

pre-examining correlation between the ambient temperature and a difference between the temperatures of the contained object and the container, measured during a predetermined period of time, which is within a range of 10 seconds to 2 minutes, and calculating the amount of heat energy based on the pre-examined correlation; and

a third step of supplying heat energy to the container via the heating block, based on a result of the second step;

~~wherein in the second step, the amount of heat energy necessary for raising the temperature of the contained object up to the predetermined temperature is calculated based on a pre-examined correlation between the ambient temperature and a difference between the temperatures of the contained object and the container when a predetermined time passes.~~

11. (Previously Presented) The method of raising a temperature of a contained object according to claim 10, wherein in the second step, the amount of heat energy to be supplied to the container is controlled by setting a temperature of the heating block and setting a time that the set temperature of the heating block is to be maintained.

12. (Previously Presented) The method of raising a temperature of a contained object according to claim 10, wherein in the second step, the supplied time of the heat energy is divided into a first period from a beginning of the supply of the heat energy until a predetermined time passes, and a second period from an end of the predetermined time until the supply of the heat energy ends,

wherein the amount of heat energy to be supplied to the container is regulated so that the amount of heat energy to be supplied per unit time is smaller in the second period than in the first period.

13. (Previously Presented) The method of raising a temperature of a contained object according to claim 10, wherein the predetermined time is set within an initial stage of raising the temperature of the contained object up to the predetermined temperature where the temperature rising amount of the contained object and the container per unit time is relatively large.

14. (Cancelled) ~~The method of raising a temperature of a contained object according to claim 13, wherein the predetermined time is set at a value selected from a range of 10 seconds to 2 minutes after the beginning of the temperature raising.~~

15-23. (Cancelled)